

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 61251USN(50586) U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <div style="font-size: 2em; font-weight: bold; text-align: center;">10/561025</div>
INTERNATIONAL APPLICATION NO. PCT/US04/017064	INTERNATIONAL FILING DATE 28 May 2004	PRIORITY DATE CLAIMED 29 May 2003
TITLE OF INVENTION HETEROCYCLIC COMPOUNDS FOR PREVENTING AND TREATING DISORDERS ASSOCIATED WITH EXCESSIVE BONE LOSS		
APPLICANT(S) FOR DO/EO/US Mitsunori Ono et al.		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> <b>A copy of the International Application as filed (35 U.S.C. 371 (c)(2))</b> <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> <b>Preliminary Amendment.</b></li> <li>14. <input checked="" type="checkbox"/> <b>An Application Data Sheet under 37 CFR 1.76.</b></li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> </ol>		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.47) <b>10/561025</b>		INTERNATIONAL APPLICATION NO. PCT/US04/017064		ATTORNEY'S DOCKET NUMBER 61251USN(50586)	
20. <input checked="" type="checkbox"/> Other items or information: <b>Petition to Revive An Unintentionally Abandoned Application</b> <b>Return Receipt Postcard</b>					
The following fees have been submitted				<b>CALCULATIONS</b>	<b>PTO USE ONLY</b>
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300				\$ 300.00	
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 All other situations ..... \$200				\$ 200.00	
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400 All other situations..... \$500				\$ 500.00	
<b>TOTAL OF 21, 22 and 23 =</b>				<b>\$ 1,000.00</b>	
<input checked="" type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
151 - 100 =	51 /50 =	2	x \$250.00	\$ 500.00	
Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	70 - 20 =	50	x 50.00	2,500.00	
Independent claims	8 - 3 =	5	x 200.00	1,000.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 360.00	360.00	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 5,360.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				2,680.00	
<b>SUBTOTAL =</b>				<b>\$ 2,680.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 2,680.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 2,680.00</b>	
				Amount to be refunded:	\$
				Amount to be charged	\$

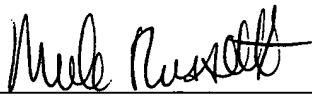
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- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 04-1105 in the amount of \$ 2,680.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-1105. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Jeffrey D. Hsi  
EDWARDS ANGELL PALMER & DODGE LLP  
P.O. Box 55874  
Boston, Massachusetts 02205  
(617) 439-4444

  
SIGNATURE

Mark D. Russett  
NAME

CUSTOMER NUMBER: 21874

41,281  
REGISTRATION NUMBER

10/561025

1AD6 Rec'd PCT/PTO 16 DEC 2005

Application No. (if known): Not Yet Assigned

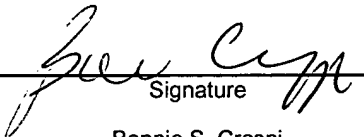
Attorney Docket No.: 61251USN(50586)

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 756263700 US in an envelope addressed to:

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on December 16, 2005  
Date



Signature

Bonnie S. Crespi

Typed or printed name of person signing Certificate

Registration Number, if applicable

(617) 439-4444

Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal Letter to the United States Designated-Elected Office (3 pages)  
Fee Transmittal (1 page)  
Application Data Sheet (3 pages)  
First Preliminary Amendment (3 pages)  
Petition to Revive An Unintentionally Abandoned Application Pursuant to 37 CFR 1.137(b) (2 pages)  
Copy of International Patent Application (151 pages)  
First Preliminary Amendment (3 pages)  
Charge \$4,180.00 to deposit account 04-1105

Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

<p><i>Effective on 12/08/2004.</i> <i>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</i></p> <h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">For FY 2005</h3>		<p><b>Complete if Known</b></p>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	Not Yet Assigned
		Filing Date	Concurrently Herewith
		First Named Inventor	Mitsunori Ono
		Examiner Name	Not Yet Assigned
		Art Unit	N/A
TOTAL AMOUNT OF PAYMENT		(\$)	750.00
		Attorney Docket No.	61251USN(50586)

<b>METHOD OF PAYMENT</b> (check all that apply)	
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> None <input type="checkbox"/> Other (please identify): _____	
<input checked="" type="checkbox"/> Deposit Account    Deposit Account Number: <u>04-1105</u> Deposit Account Name: <u>Edwards Angell Palmer &amp; Dodge LLP</u>	
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee	
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Credit any overpayments	

<b>FEE CALCULATION</b>								
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>								
Application Type	Fee (\$)	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
		Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	
Utility	300	150	500	250	200	100		
Design	200	100	100	50	130	65		
Plant	200	100	300	150	160	80		
Reissue	300	150	500	250	600	300		
Provisional	200	100	0	0	0	0		
<b>2. EXCESS CLAIM FEES</b>								
							<b>Small Entity</b>	
							<b>Fee (\$)</b>	<b>Fee (\$)</b>
Each claim over 20 (including Reissues)							50	25
Each independent claim over 3 (including Reissues)							200	100
Multiple dependent claims							360	180
<b>Total Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>		<b>Multiple Dependent Claims</b>		
<u>70</u>		<u>- 20 = 50</u>	x <u>        </u>	<u>        </u>		<b>Fee (\$)</b>		<b>Fee Paid (\$)</b>
<b>Indep. Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>				
<u>8</u>		<u>- 3 = 5</u>	x <u>        </u>	<u>        </u>				
<b>3. APPLICATION SIZE FEE</b>								
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
<b>Total Sheets</b>		<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>		<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>		
<u>151</u>		<u>- 100 = 51</u>	<u>/50 2</u> (round up to a whole number) x		<u>        </u>	<u>        </u>		
<b>4. OTHER FEE(S)</b>								
Non-English Specification, \$130 fee (no small entity discount)								
Other (e.g., late filing surcharge): <u>1453 Petition to Revive under 37 CFR 1.137(b)</u>								<u>750.00</u>

<b>SUBMITTED BY</b>			
Signature		Registration No. (Attorney/Agent)	41,281
Name (Print/Type)	Mark D. Russett	Telephone	(617) 439-4444
		Date	December 16, 2005

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 756263700 US, in an envelope addressed to: MS PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.	
Dated: December 16, 2005	Signature:  (Bonnie S. Crespi)